complementary to a sex chromosome or segment thereof;

(b) forming a duplex between said test nucleic acid sample and said probe; and

(c) analyzing whether said duplex contains a nucleotide mismatch, thereby determining whether said test nucleic acid sample contains a sequence variance.

Add the following new claim 52.

52. (New) The method of claim 22, wherein said cell is a somatic cell hybrid that is formed from the fusion of a cell or chromosome to a recipient cell.

REMARKS

As presently claimed, the invention provides methods of using a probe that is derived from a hemizygous cell and that is complementary to a sex chromosome to determine whether a nucleic acid sample contains a sequence variance.

Claims 22 and 46-51 were examined in this case. Claims 22, 46, 47, and 49- 51 were rejected under 35 U.S.C. § 102. Claim 48 was determined to be allowable if rewritten in independent form.

Support for the Amendments

In the interest of expediting prosecution, applicant has amended the present claims to recite subject matter from claim 48 that was determined to be allowable. In particular, claim 22 (from which the remaining claims depend) has been amended to specify that the probe is derived from a hemizygous cell (as disclosed, for example, at page 6, lines 4-20, page 22, lines 14-17, and page 23, lines 2-6, of the specification). The subject matter canceled from claim 51 has been incorporated into new claim 52, which specifies that the hemizygous cell is a somatic cell hybrid (as disclosed, for example, at pages 27-29 of the specification).